

disclosed amino acid sequences. The Examiner acknowledged that the disclosure is enabling for such claims. Accordingly, this rejection has been obviated and should be withdrawn.

Claims 33-36 and 39 were rejected under 35 U.S.C. §112, for failure to provide an enabling description insofar as these claims assertedly encompassed "any variant" of the disclosed V1-1 gene that encodes a protein with the requisite ability to induce tendon/ligament formation." Claims 46-49 and 52 recite "allelic variants of " SEQ ID NO. 1 and "sequences degenerate to" those sequences. The terms "allelic variant" and "degenerate sequences" are each well understood to have a specific meaning in the art. Thus, these terms are sufficiently clear for one skilled person in the art to understand and the skilled artisan would reasonably expect that such DNA sequences would encode active protein as described in the specification.

Claims 29-32, 37, 38, 40 and 41 where further rejected under 35 U.S.C. §112, second paragraph for indefiniteness. The phrase "ability to form" was objected to. Applicants thank the Examiner for this observation, and have cancelled the objected to language from the new claims, thus obviating this rejection. The new claims recite that the claimed proteins induce formation of tendon/ligament-like tissue.

The objection to the language of claim 30, part (b) has been obviated by cancellation of this claim in favor of new claim 43.

The claims have been rejected under 35 U.S.C. §102(a) as being anticipated by Neidhardt et al. WO93/16099. The new claims do not include the hybridization language present in the

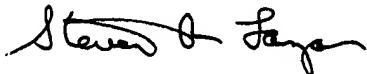
USSN 08/217,780  
March 25, 1994  
Page 5

former claims. Thus, an assertion that the sequences disclosed in the reference would hybridize to Applicants' disclosed sequences is not grounds for rejecting the present claims. Because of the differences between the MP52 protein of Neidhardt and Applicants' novel V1-1 protein, the skilled person in the art would not consider MP52 and Applicants' claimed protein to be "allelic variants" or "degenerate sequences." The differences between the two are substantial: 24 amino acids out of 104 in the C-terminal portion of the protein, including 5 out of 6 amino acids in one fragment. Therefore, this rejection has been obviated and should be withdrawn.

### CONCLUSION

With the submission of new claims 42 to 54, the present case is in condition for allowance. While it is believed that no fee is due with this response, Applicant hereby authorizes the Examiner to charge payment of any fees due in this application to Deposit Account No. 07-1060.

Respectfully submitted,



Steven R. Lazar  
Attorney for Applicants  
Reg. No. 32,618  
(617) 498-8260

GENETICS INSTITUTE, INC.  
87 CambridgePark Drive  
Cambridge, Ma. 02140